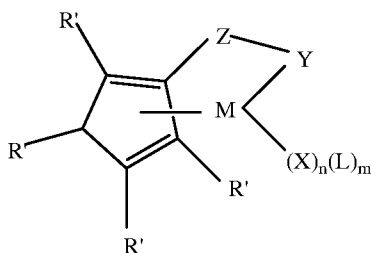


### **Amendments to the Specification**

Please replace the paragraph beginning on page 16, line 4, with the following rewritten paragraph.

Suitable catalysts may also be selected from the metal coordination complex which corresponds to the formula below:

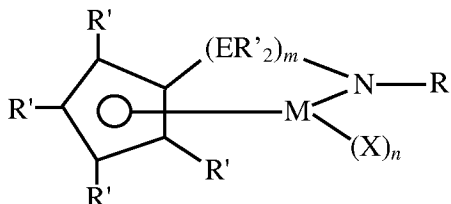


Formula II

wherein  $R'$ , in each occurrence, is independently selected from the group consisting of hydrogen, alkyl, aryl, silyl, germyl, cyano, halo and combinations thereof having up to 20 non-hydrogen atoms;  $X$ , in each occurrence, independently, is selected from the group consisting of hydride, halo, alkyl, aryl, silyl, germyl, aryloxy, alkoxy, amide, siloxy, and combinations thereof having up to 20 non-hydrogen atoms;  $L$ , in each occurrence, is a ~~neutral~~ neutral Lewis base ligand having up to 30 non-hydrogen atoms;  $Y$  is  $-O-$ ,  $-S-$ ,  $-NR^*-$ ,  $-PR^*-$ , or a neutral two electron donor ligand selected from the group consisting of  $OR^*$ ,  $SR^*$ ,  $NR^*_2$ ,  $PR^*_2$ ;  $M$ ,  $n$ , and  $m$  are as previously defined; and  $Z$  is  $SiR^*_2$ ,  $CR^*_2$ ,  $SiR^*_2SiR^*_2$ ,  $CR^*_2CR^*_2$ ,  $CR^*=CR^*$ ,  $CR^*_2SiR^*_2$ ,  $GeR^*_2$ ,  $BR^*$ ,  $BR^*_2$ ; wherein:  $R^*$ , in each occurrence, is independently selected from the group consisting of hydrogen, alkyl, aryl, silyl, halogenated alkyl, halogenated aryl groups having up to 20 non-hydrogen atoms, and mixtures thereof, or two or more  $R^*$  groups from  $Y$ ,  $Z$ , or both  $Y$  and  $Z$  form a fused ring system.

Please replace the paragraph beginning on page 16, line 26, with the following rewritten paragraph.

Additional catalysts may be selected from the amidosilane- or amidoalkanediy- compounds corresponding to the formula below:



Formula III,

wherein: M is titanium, zirconium or hafnium, bound in an  $\eta^5$  bonding mode to the cyclopentadienyl group; R', in each occurrence, is independently selected from the group consisting of hydrogen, silyl, alkyl, aryl and combinations thereof having up to 10 carbon or silicon atoms; E is silicon or carbon; X, independently, in each occurrence, is hydride, halo, alkyl, aryl, aryloxy or alkoxy of up to 10 carbons; m is 1 or 2; and n is 1 or 2 depending on the valence of M.

Please replace the paragraph beginning on page 18, line 5, with the following rewritten paragraph.

One class of the above catalysts is the indenyl containing metal, as shown below, wherein:



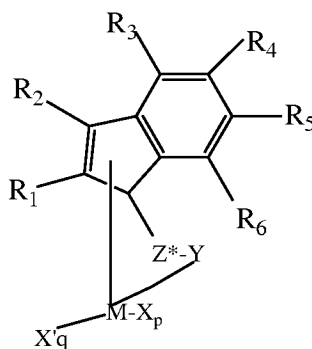
Formula IV

M is titanium, zirconium or hafnium in the +2, +3 or +4 formal oxidation state; A' is a substituted indenyl group, substituted in at least the 2 or 3 position with a group selected from hydrocarbyl, fluoro-substituted hydrocarbyl, hydrocarbyloxy-substituted hydrocarbyl, dialkylamino-substituted hydrocarbyl, silyl, germyl and mixtures thereof, the group containing up to 40 non-hydrogen atoms, and the A' further being covalently bonded to M by means of a divalent Z group; Z is a divalent

moiety bound to both A' and M via  $\sigma$ -bonds, the Z comprising boron, or a member of Group 14 of the Periodic Table of the Elements, and also comprising nitrogen, phosphorus, sulfur or oxygen; X is an anionic or dianionic ligand group having up to 60 atoms exclusive of the class of ligands that are cyclic, delocalized,  $\pi$ -bound ligand groups; X', independently, in each occurrence, is a neutral Lewis base, having up to 20 atoms; p is 0, 1 or 2, and is two less than the formal oxidation state of M, with the proviso that when X is a dianionic ligand group, p is 1; and q is 0, 1 or 2.

Please replace the paragraph beginning on page 20, line 1, with the following rewritten paragraph.

More preferred catalysts are complexes corresponding to the formula below:



Formula VI

wherein: R<sub>1</sub> and R<sub>2</sub> are hydrogen or C<sub>1-6</sub> alkyl, with the proviso that at least one of R<sub>1</sub> or R<sub>2</sub> is not hydrogen; R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, and R<sub>6</sub> independently are hydrogen or C<sub>1-6</sub> alkyl; M is titanium; Y is -O-, -S-, -OR\*-, -PR\*-; Z\* is SiR\*<sub>2</sub>, CR\*<sub>2</sub>, SiR\*<sub>2</sub>SiR\*<sub>2</sub>, CR\*<sub>2</sub>CR\*<sub>2</sub>, CR\*=CR\*, CR\*<sub>2</sub>SiR\*<sub>2</sub>, or GeR\*<sub>2</sub>; R\*, in each occurrence, is independently hydrogen, or a member selected from hydrocarbyl, hydrocarbyloxy, silyl, halogenated alkyl, halogenated aryl, and combinations thereof, the R\* having up to 20 non-hydrogen atoms, and optionally, two R\* groups from Z (when R\* is not hydrogen), or an R\* group from Z and an R\* group from Y form a ring system; p is 0, 1 or 2; q is zero or one; with the proviso that: when p is 2, q is zero, M is in the +4 formal oxidation state, and X is, independently, in each occurrence, methyl or benzyl, when p is 1, q is zero, M is in the +3 formal oxidation state, and X is 2-(N,N-dimethyl)aminobenzyl; or M is

in the +4 formal oxidation state and X is 1,4-butadienyl, and when p is 0, q is 1, M is in the +2 formal oxidation state, and X' is 1,4-diphenyl-1,3-butadiene or 1, 3-pentadiene. The latter diene is illustrative of unsymmetrical diene groups that result in production of metal complexes that are actually mixtures of the respective geometrical isomers.